

ABSTRACT OF THE DISCLOSURE

A composition of a fiber reinforced laminate material that when thermoformed or compression molded forms a composite having a Class-A surface that is resin rich. The laminate material has a layer of a thermoplastic resin with an initiator and catalyst; a glass mat; an intra-layer of a polymerizable component that is a lower viscosity mixture of oligomers, monomers and thermoplastic resin; a second glass mat, and another layer of a thermoplastic resin with an initiator and catalyst. When thermoformed or compression molded, the combination of heat and pressure force the low viscosity polymerizable component through the permeable glass mats and toward the surface. The initiator and catalyst cause the polymerizable component to polymerize forming a Class-A surface that is resin rich. The thermoplastic resin thoroughly permeates the reinforcing fiber forming a composite having a core with a nearly uniform mixture of reinforced glass fiber and thermoplastic resin.